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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,957	01/31/2002	Fangjiang Guo	88164.000002	4571

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EXAMINER	
PIASCIK, SUSAN L	
ART UNIT	PAPER NUMBER
3643	

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/062,957	Applicant(s) GUO, FANGJIANG	
	Examin r Susan L Piascik	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 May 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show element numbers 94 (robotic actuating arm) or 60 (milking unit) as described in the specification (page 17). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson ('280).

In regards to **claim 1**, Nelson teaches a method of presenting an animal to be milked comprising the steps of rearwardly loading the animal into one of a plurality of milking stalls and forwardly unloading the animal from the one of the plurality of milking stalls. Each milking stall has a unique exit path extending from the milking stall to a released area (see column 2, lines 53-60).

Regarding **claim 2**, Nelson teaches the claimed method further comprising milking the animal prior to forwardly unloading the animal from the one of the plurality of milking stalls.

In regards to **claim 3**, Nelson teaches the method further comprising passing the animal through an ingress/egress gate (20) upon rearwardly loading the animal into the one of the plurality of milking stalls.

Regarding **claim 8**, Nelson teaches a method further comprising locating an operator pit (12) adjacent a rear end of the milking stall.

In regards to **claim 9**, Nelson teaches a method wherein the unique exit path associated with one of the plurality of stalls is parallel to a unique exit path associated with a second one of the milking stalls. See Figure 1.

Regarding **claim 11**, Nelson teaches a method further comprising simultaneously rearwardly loading a second animal into a second one of the plurality of stalls.

Claim 32-33, 35-38, 41-45 and 47-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Waybright.

In regards to **claim 32**, Waybright teaches a method of presenting an animal to be milked in a milking parlor comprising translating a first animal cart (40) along a predetermined path (10, 12) relative to a plurality of milking stalls (32) to operably locate the transport cart (40) with respect to an unoccupied milking stall.

Regarding **claim 33**, Waybright teaches a method further comprising a released area (36) adjacent to the plurality of milking stalls.

In regards to **claim 35**, Waybright teaches a method further comprising loading at least one animal on the first animal transport cart (40) prior to moving the first animal transport cart.

In regards to **claim 36**, Waybright teaches a method further comprising translating a second animal transport cart (40) relative to the plurality of milking stalls (32).

In regards to **claim 37**, Waybright teaches a method further comprising loading a plurality of animals on the first animal transport cart (40).

In regards to **claim 38**, Waybright teaches a method further comprising moving an ingress/egress gate (52) from an open position to a closed position upon rearwardly loading the animal into the milking stall. See column 8, lines 67-68.

In regards to **claim 41**, Waybright teaches a method further comprising urging the animal rearwardly into the milking stall by a distance independent of an adjacent milking stall.

Regarding **claim 42**, Waybright teaches a milking parlor comprising a milking stall (32) and a transport cart (40) translatable relative to the milking stall (32) between a first position aligned with the milking stall and a second position spaced from the milking stall.

In regards to **claim 43**, Waybright teaches a milking parlor comprising an ingress/egress gate (52) connected to the milking stall. The gate is moveable between a closed position and an open position.

Regarding **claim 44**, Waybright teaches a milking parlor wherein the ingress/egress gate is a lift gate.

Regarding **claim 45**, Waybright teaches a milking parlor wherein the ingress/egress gate rotates around a horizontal axis.

In regards to **claim 47**, Waybright teaches a milking parlor wherein the milking stall includes a closed end and further comprises an operator pit (20) adjacent the closed end.

Regarding **claim 48**, Waybright teaches a milking parlor wherein the milking stall includes an open end and further comprises a released area (36) adjacent the open end.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson ('280) in view of van der Lely ('837).

In regards to **claim 4**, Nelson ('280) teaches the claimed method except for specifying a milking robot. However, van der Lely teaches a method of milking which aligns a robot with the milking stall prior to unloading the animal from the milking stall. Therefore, one having ordinary skill in the art would have found it obvious to modify the stall of Nelson, to include a milking robot, as taught by van der Lely, in order to provide an automated system, thereby decreasing the amount of work for a human operator.

In regards to **claim 6**, Nelson ('280) teaches the claimed method except for monitoring animal specific data. However, van der Lely teaches a method of milking, which monitors animal specific data prior to unloading the animal from the milking stall. Therefore, one having

ordinary skill in the art would have found it obvious to modify the method of Nelson, to include monitoring of animal data, as taught by van der Lely, in order to ensure each animal is milked correctly.

Regarding **claim 7**, Nelson, as modified, teaches a method further comprising matching the monitored animal specific data with a corresponding identified animal.

Claims 5, 12-14, 16, 19, 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson ('280) in view of Waybright.

In regards to **claim 5**, Nelson teaches the claimed method except for specifying the animal to be loaded onto a transport car before being milked. However, Waybright teaches a method for presenting an animal to be milked where the animal is loaded onto a car prior to loading the animal into the milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Nelson, to include loading the animal on a transport car, as shown by Waybright, in order to efficiently move the animals to the milking stalls in order to save time during the milking process.

In regards to **claim 12**, Nelson teaches a method of presenting animals to be milked comprising rearwardly loading the animal into a milking stall and then forwardly unloading the animal from the milking stall. Nelson fails to teach the animal unloaded from a moveable transport cart before entering the stall. However, Waybright teaches a method for milking an animal where the animal is unloaded from a moveable cart into the milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Nelson, to include unloading the animal from a moveable transport

cart, as shown by Waybright, in order to efficiently move the animals to the milking stalls in order to save time during the milking process.

Regarding **claim 13**, Nelson, as modified, teaches the claimed method further comprising milking the animal prior to forwardly unloading the animal from the one of the plurality of milking stalls.

In regards to **claim 14**, Nelson, as modified, teaches the method further comprising passing the animal through an ingress/egress gate (20) upon rearwardly loading the animal into the one of the plurality of milking stalls.

In regards to **claim 16**, Nelson, as modified, teaches the method further comprising loading the animal to be milked onto a transport cart prior to rearwardly loading the animal into the milking stall.

Regarding **claim 19**, Nelson, as modified, teaches a method further comprising locating an operator pit (12) adjacent a rear end of the milking stall.

In regards to **claim 21**, Nelson, as modified, teaches a method further comprising loading a plurality of animals onto the transport cart.

In regards to **claim 22**, Nelson teaches a method of presenting animals to be milked comprising rearwardly loading a first animal into a milking stall. Nelson fails to teach the animal loaded onto a transport cart before entering the stall. However, Waybright teaches a method for milking an animal wherein the first animal is loaded onto a moveable transport cart and then the cart translates to align with an unoccupied milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Nelson, to include a moveable transport cart, as shown by Waybright, in order

to efficiently move the animals to the milking stalls in order to save time during the milking process.

In regards to **claim 23**, Nelson, as modified, teaches a method further comprising translating the transport cart along a direction transverse to a longitudinal dimension of the milking stall.

Regarding **claim 24**, Nelson, as modified, teaches the claimed method further comprising forwardly unloading the first animal from the milking stall.

Regarding **claim 25**, Nelson, as modified, teaches the claimed method further comprising forwardly unloading the first animal from the milking stall into a released area.

Regarding **claim 26**, Nelson, as modified, teaches the claimed method further comprising forwardly unloading the first animal from the milking stall into a released area along a unique path.

Regarding **claim 27**, Nelson, as modified, teaches the claimed method further comprising loading a second animal onto the transport cart prior to unloading the first animal. See Waybright disclosure.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson ('280) in view of Braum.

In regards to **claim 10**, Nelson teaches the claimed method except for specifying moving a moveable platform from a spaced first position to a second position adjacent a rear end of the milking stall. However, Braum teaches a method for presenting an animal to be milked comprising moving a moveable platform (198) from a spaced first position to a second position

adjacent a rear end of the milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Nelson, to include a moveable platform, as shown by Braum, in order for an operator or milking robot to have convenient access to the animal, as well as being comfortably seated during the process.

Claims 15, 17-18 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson ('280) in view of Waybright and further in view of van der Lely ('837).

In regards to **claim 15**, Nelson ('280), as modified by Waybright, teaches the claimed method except for specifying a milking robot. However, van der Lely teaches a method of milking which aligns a robot with the milking stall prior to unloading the animal from the milking stall. Therefore, one having ordinary skill in the art would have found it obvious to modify the stall of Nelson, as modified, to include a milking robot, as taught by van der Lely, in order to provide an automated system, thereby decreasing the amount of work for a human operator.

In regards to **claim 17**, Nelson ('280), as modified by Waybright, teaches the claimed method except for monitoring animal specific information. However, van der Lely teaches a method of milking, which monitors animal specific information prior to unloading the animal from the milking stall. Therefore, one having ordinary skill in the art would have found it obvious to modify the method of Nelson, as modified, to include monitoring of animal information, as taught by van der Lely, in order to ensure each animal is milked correctly.

Regarding **claim 18**, Nelson, as modified, teaches a method wherein monitoring the animal specific information includes machine reading a tag connected to the animal (See van der Lely, column 5, lines 30-40).

In regards to **claim 29**, Nelson ('280), as modified by Waybright, teaches the claimed method except for specifying a milking robot. However, van der Lely teaches a method of milking which aligns a robot with the milking stall prior to unloading the animal from the milking stall. Therefore, one having ordinary skill in the art would have found it obvious to modify the stall of Nelson, as modified, to include a milking robot, as taught by van der Lely, in order to provide an automated system, thereby decreasing the amount of work for a human operator.

In regards to **claim 30**, Nelson ('280), as modified by Waybright, teaches the claimed method except for acquiring animal specific data. However, van der Lely teaches a method of milking, which monitors animal specific data prior to milking the animal. Therefore, one having ordinary skill in the art would have found it obvious to modify the method of Nelson, as modified, to include monitoring of animal information, as taught by van der Lely, in order to ensure each animal is milked correctly.

Regarding **claim 31**, Nelson, as modified, teaches the method further comprising reading a radio frequency identification tag on the first cow when the cow is in the transport cart.

Claims 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson ('280) in view of Waybright and further in view of Braum.

In regards to **claim 20**, Nelson, as modified by Waybright, teaches the claimed method except for specifying moving a moveable platform from a spaced first position to a second position adjacent a rear end of the milking stall. However, Braum teaches a method for presenting an animal to be milked comprising moving a moveable platform (198) from a spaced first position to a second position adjacent a rear end of the milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Nelson, as modified, to include a moveable platform, as shown by Braum, in order for an operator or milking robot to have convenient access to the animal, as well as being comfortably seated during the process.

In regards to **claim 28**, Nelson, as modified by Waybright, teaches the claimed method except for specifying moving a moveable platform from a spaced first position to a second position adjacent a rear end of the milking stall. However, Braum teaches a method for presenting an animal to be milked comprising moving a moveable platform (198) from a spaced first position to a second position adjacent a rear end of the milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method taught by Nelson, as modified, to include a moveable platform, as shown by Braum, in order for an operator or milking robot to have convenient access to the animal, as well as being comfortably seated during the process.

Claim 34, 39-40 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waybright in view of van der Lely ('837).

In regards to **claim 34**, Waybright teaches the claimed method except for specifying a robotic arm operably located in the milking stall. However, van der Lely teaches a method of milking which aligns a robot with the milking stall. Therefore, one having ordinary skill in the art would have found it obvious to modify the method of Waybright, to include robotic arm, as taught by van der Lely, in order to provide an automated milking system, thereby decreasing the amount of work for a human operator.

In regards to **claim 39**, Waybright teaches the claimed method except for acquiring data specific to a given animal. However, van der Lely teaches a method of milking, which monitors animal specific data prior to milking. Therefore, one having ordinary skill in the art would have found it obvious to modify the method of Waybright, to include acquiring of animal data, as taught by van der Lely, in order to ensure each animal is milked correctly.

Regarding **claim 40**, Waybright, as modified, in the previous claim teaches a method comprising a radio frequency identification reader (see van der Lely disclosure). It would have been obvious to one having ordinary skill in the art at the time of the invention to connect the reader to the cart, since it has been held that rearranging parts of an invention involves only routine skill in the art. (*In re Japikse*, 86 USPQ 70).

In regards to **claim 49**, Waybright teaches the claimed method except for specifying a robotic arm operably located in the milking stall. However, van der Lely teaches a method of milking which aligns a robot with the milking stall. Therefore, one having ordinary skill in the art would have found it obvious to modify the method of Waybright, to include robotic arm, as taught by van der Lely, in order to provide an automated milking system, thereby decreasing the amount of work for a human operator.

Regarding **claim 50**, Waybright, fails to teach an RFID reader connected to the transport cart. However, van der Lely teaches a milking parlor having an RFID in order to monitor animal specific data prior to milking. Therefore, one having ordinary skill in the art would have found it obvious to modify the milking parlor of Waybright, to include an RFID, as taught by van der Lely, in order to ensure each animal is milked correctly. Further, it would have been obvious to one having ordinary skill in the art at the time of the invention to connect the reader to the cart, since it has been held that rearranging parts of an invention involves only routine skill in the art. (*In re Japikse*, 86 USPQ 70).

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waybright

Regarding **claim 46**, Waybright teaches a milking parlor wherein the ingress/egress gate rotates. However, Waybright does not teach the gate to rotate around a vertical axis. However, one having ordinary skill in the art at the time of the invention would have found it obvious to change the direction of rotation, since it has been held that rearranging parts of an invention involves only routine skill in the art. (*In re Japikse*, 86 USPQ 70).

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waybright in view of Braum.

In regards to **claim 51,** Waybright teaches the claimed invention except for specifying a moveable platform, moveable from a spaced first position to a second position adjacent a rear end of the milking stall. However, Braum teaches a milking parlor comprising a moveable platform (198) moveable from a spaced first position to a second position adjacent a rear end of

the milking stall. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the parlor taught by Nelson, to include a moveable platform, as shown by Braum, in order for an operator or milking robot to have convenient access to the animal, as well as being comfortably seated during the process.

Citation of Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of art with respect to methods of milking animals and milking apparatus:

U.S. Pat. No. 3,703,884 to Maddalena et al.

U.S. Pat. No. 5,615,637 to Nelson

U.S. Pat. No. 5,782,199 to Oosterling

U.S. Pat. No. 5,959,526 to Tucker

U.S. Pat. Publication No. 2001/0042515 A1 to Gallagher et al.

U.S. Pat. Publication No. 2001/0047765 A1 to DeWaard

U.S. Pat. Publication No. 2002/0023592 A1 to Peacock

U.S. Pat. No. 6,516,744 to Bjork et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan L Piascik whose telephone number is (703)305-0299. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (703)308-2574. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-7687 for regular communications and (703)305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-7687.

slp
May 1, 2003

PETER M POON
SUPERVISORY PATENT EXAMINER
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